

Computer
Systems
Policy
Project

Gilbert F. Amello Apple

Eckhard Pfeiffer Compaq

Ronald L. Skates Data General

Robert B. Palmer Digital Equipment

Lewis E. Platt Hewlett-Packard

Louis V. Gerstner, Jr. IBM

Lars Nyberg NCR

Edward R. McCracken Silicon Graphics

William E. Foster Stratus Computer

Scott G. McNealy Sun Microsystems

Roel Pieper Tandem

James A. Unruh Unisys

April 23, 1997

The Honorable Reed Hundt
Chairman
Federal Communications Commission
1919 M Street, NW
Washington, D.C. 20554

EX PARTE OR LATE FILED

DOCKET FILE COPY ORIGINAL

RECEIVED

APR 25 1997

Federal Communications Commission
Office of Secretary

Re: Usage of the Public Switched Network by Information Service
Providers and Internet Access Providers (CC D No 96-263)

Dear Chairman Hundt:

The Computer Systems Policy Project (CSPP), an association of the Chief Executive Officers of twelve major U.S. computer companies, has an on-going interest in policy regarding the Internet and the global information infrastructure. The Commission's pending proceeding on Usage of the Public Switched Network by Information Service Providers and Internet Access Providers (CC D No 96-263) raises important issues for our industry. CSPP would like to offer to the Commission its perspectives on the requirements for further growth of the Internet.

As an initial matter, CSPP commends the Commission for tentatively concluding not to impose access charges on enhanced service providers, and for proposing to examine the impact of Internet and Information Services in a separate proceeding. These new services have developed in and are offered in a competitive, consumer-driven environment. The Commission correctly understands that the questions about whether the existing telecommunications infrastructure can support expansion of Internet and other information services merit a separate factual record developed by a wider range of interested parties.

CSPP's analysis of these questions and recommendations for action are briefly summarized below.

Competition Will Promote Internet Growth

CSPP envisions an environment in which all consumers - large and small businesses, home users, students, telecommuters - have access to multiple interoperable, high-capacity networks able to support sophisticated data services at market driven prices. For public benefit, we believe that competition is critical to the development of these networks and to the deployment of robust applications, including telemedicine, distance learning and electronic commerce.

Three policy principles are fundamental to this vision:

1. The competitive marketplace itself will push toward deployment of high-capacity networks to accommodate these Internet or data services.
2. Public policy should be technology neutral: the market itself must be allowed to determine what technology solutions can best provide the needed infrastructure.

3. Consumers should not be asked to defer Internet demands until such time as voice telephone networks are upgraded to handle digital traffic; competitive access to existing local networks must be provided so that effective interim solutions can be made available.

These principles are consistent with the aims of the Telecommunications Act of 1996 and, we believe, form a solid public policy foundation for regulatory actions aimed at an improved data access infrastructure.

Barriers to a Data Access Infrastructure

Lack of competition may prove to be the most significant barrier in the successful deployment of a data access infrastructure. Local telephone networks today provide the primary access to data services for residential and small business users. The long-haul backbone networks are subject to competition, and these networks have been upgraded to high-capacity networks. The local telephone exchange networks, however, generally have not been. In the foreseeable future, the demands of Internet customers for high-capacity transmission cannot be met by circuit-switch facilities.

The local networks and switches, designed to handle low-capacity voice traffic, are of the greatest immediate concern. These and other architectural restrictions on capacity and speed set a ceiling on the growth of Internet and data services.

New technologies promise alternatives to the local telephone network, but none of these options are widely available today. For example, both wireless and low-earth orbit satellite services can offer Internet connections that avoid the local telephone loop, but these services require extensive development time and may have geographic limitations. The cable TV industry has direct-to-home networks, but these have been upgraded to handle two-way, high-speed full motion video and data traffic in only a few regions. These alternatives must be encouraged, but none is likely to offer a ubiquitous solution for data access traffic soon.

In sum, the future of Internet and data services lies most immediately with the telephone networks. Data traffic can be fostered and voice traffic protected if data traffic can be segregated and transmitted on packet-switched networks. Technology already exists today, in pilot programs, that will allow the local exchange carriers or competitors to create such networks, routing data traffic from the local loop onto the digital backbone networks and leaving slower voice traffic on existing circuit-switched analog lines.

Competition for high capacity data traffic is critically needed at the local loop in order to establish the incentives to deploy data-friendly technology. The local exchange carriers may wish to enter this market and should be encouraged along with new providers. We believe that competition will develop rapidly if new providers of data transport services are given access to the existing local telephone facilities and allowed to install data-friendly technology and interconnect to the backbone networks. Action by the Commission and the states is necessary to ensure this.

Recommendations

CSPP recommends that the Commission initiate a specific rulemaking proceeding on the nation's need for a ubiquitous data access infrastructure and the importance of competition

April 23, 1997

Page 3

in meeting that need. These issues possibly can be addressed in one of several proceedings already underway or planned by the Commission, including the current Internet NOI, the new Innovation and Investment proceeding, and Section 706 of the Act relating to advanced services.

As part of an effort to stimulate deployment of such a data access infrastructure, the Commission should attempt to create competitive opportunities for data transport service at the level of the local telephone exchange networks. This includes establishing economically viable rights for data transport service providers (non-common carriers) to:

- interconnect to the existing local loop;
- co-locate competitive data networking equipment; and
- contract for unbundled network elements at cost-based prices.

The state public utility commissions have important authority in these areas and there is growing state interest in the future of the Internet and data services. A common approach at both the federal and state level will encourage development of the ubiquitous data access infrastructure we envision. Accordingly, we request that the Commission encourage a cooperative approach to these issues, perhaps through a Joint Federal-State Board.

Finally, it is recommended that the Commission (and the states) evaluate and seek to remove regulatory barriers to rapid deployment of alternative data-friendly networks, such as wireless and cable. These actions will enable the market itself to create the best solutions to the explosive growth of Internet and data service demand.

Sincerely,



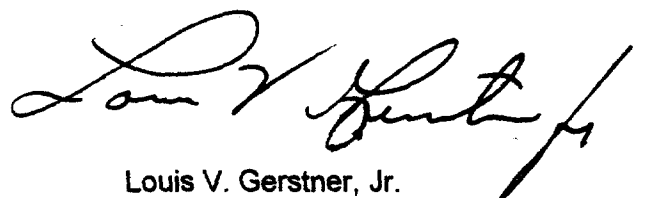
Gilbert F. Amelio
Apple



Lewis E. Platt
Hewlett-Packard



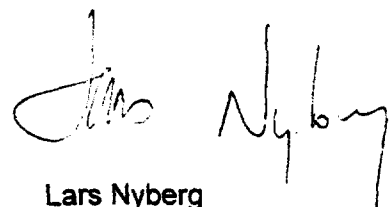
Eckhard Pfeiffer
Compaq



Louis V. Gerstner, Jr.
IBM



Ronald L. Skates
Data General



Lars Nyberg
NCR Corporation

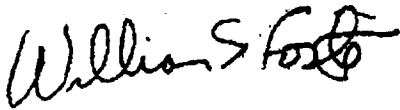
April 23, 1997
Page 4



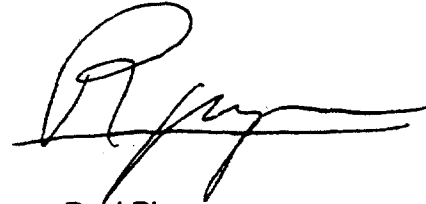
Robert B. Palmer
Digital Equipment



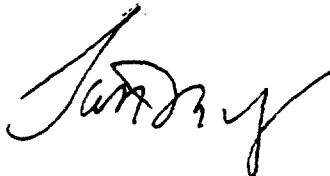
Edward R. McCracken
Silicon Graphics



William E. Foster
Stratus Computer



Roel Pieper
Tandem



Scott G. McNeary
Sun Microsystems



James A. Unruh
Unisys

cc: The Honorable James Quello
The Honorable Rachelle Chong
The Honorable Susan Ness
Acting Secretary William Canton
State Public Utilities Commissions